

MONTHLY TELESEISMIC BULLETIN of SZGRF-ERLANGEN - September 1998

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H. Aichele, K. Klinge, R. Hohl

date	station	time	distance	phase	backazimut	comp	per[s]	ampl[nm]	magn
	SZGRF or NEIC-QED		LOCATION						

1998-09-01

GRA1	01:38:54.4	i	PKP	c	Z				
GRA1	01:38:58.1	i		c	Z				
NEIC:	OT 01:19:37.5	17.5S	174.9W	dep220km	mb5.3				
TONGA ISLANDS									

1998-09-01

GRA2	10:48:05.0	e	(PKP)		Z				
NEIC:	OT 10:29:48.5	58.1S	26.5W	dep152km	mb5.3				
SOUTH SANDWICH ISLANDS REGION									

1998-09-01

GRA1	10:59:00.2	e	PKP		Z				
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1998-09-01

GRA1	14:53:22.3	e	PKP		Z				
GRA1	14:53:24.1	e			Z				
GRA1	16:02:27.2	e	L		Z	T21.2	A131		
NEIC:	OT 14:33:49.4	16.7S	173.7W	dep100km	mb5.3				
TONGA ISLANDS									

1998-09-01

GRA1	23:49:50.5	e	PKP		Z				
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1998-09-02

GRA1	00:40:12.1	e	(PKP)		Z				
NEIC:	OT 00:20:55.2	35.8S	103.6W	dep 10km	mb4.6				
SOUTHERN PACIFIC OCEAN									

1998-09-02

	D	70.3	AZ350						
GRA1	02:12:20.0	i	P		d	Z			mb4.8

BEAM 02:12:20.0 T1.0 A8
SZGRF: OT 02:01:11.9 59.4N 150.8W dep 33km
KENAI PENINSULA, ALASKA

1998-09-02 D 88.7 AZ 67
GRA1 08:51:19.9 i P c Z mb6.7
BEAM 08:51:19.9 T1.5 A671
GRA1 09:42:11.8 e L Z T21.1 A63147 MS7.0
NEIC: OT 08:37:27.2 5.5N 126.7E dep 33km mb6.4
MINDANAO, PHILIPPINE ISLANDS

1998-09-02 D 2.2 247km
GRC1 12:52:19.5 e Pg Z M13.1
GRA1 12:53:03.4 e Sg N M13.2
SZGRF: OT 12:51:38.8
SW of St. Gallen/CH

1998-09-02
GRA1 18:00:09.9 e (PKP) Z
NEIC: OT 17:37:15.0 14.1S 166.8E dep 33km mb4.7
VANUATU ISLANDS

1998-09-02
GRA1 19:12:49.4 i PKP d Z
NEIC: OT 18:52:40.1 29.6S 178.8W dep209km mb5.4
KERMADEC ISLANDS, NEW ZEALAND

1998-09-02
GRA1 19:16:23.7 e PKP Z

1998-09-02
GRA1 20:08:21.9 e (PKP) Z
NEIC: OT 19:49:24.3 4.9S 152.2E dep 33km mb5.1
NEW BRITAIN REGION, P.N.G.

1998-09-02
GRA1 21:01:02.5 e PKP Z
NEIC: OT 20:40:04.8 12.7S 169.2E dep600km mb5.0
SANTA CRUZ ISLANDS REGION

1998-09-03 D 87.8 AZ 67
GRA1 02:15:16.3 e P Z mb4.9
BEAM 02:15:16.3 T1.5 A9
GRA1 02:15:41.0 e (pP) Z
GRA1 03:03:22.9 e L Z T21.4 A137 MS4.3
NEIC: OT 02:01:36.0 8.1N 125.7E dep 33km mb4.7
MINDANAO, PHILIPPINE ISLANDS

1998-09-03

GRA1 04:51:21.2 e PKPdf Z
 GRA1 04:51:28.9 e (PKPab) Z

1998-09-03

D 46.9

GRA1 06:51:32.1 i P d Z mb5.0
 ALIGN 06:51:32.1 T1.0 A13
 GRA1 06:51:54.5 e (pP) Z
 GRA1 06:52:15.4 e Z
 GRA1 07:11:45.0 e L Z T21.8 A219 MS4.5
 NEIC: OT 06:43:03.2 39.5N 77.3E dep 33km mb5.2
 SOUTHERN XINJIANG, CHINA

1998-09-03

D 81.8 AZ 35

GRA1 08:10:31.0 e P c Z mb6.1
 ALIGN 08:10:31.0 T1.5 A240
 GRA1 08:49:01.5 e L Z T18.2 A10164 MS6.2
 SZGRF: OT 07:58:16.5 39.3N 143.4E dep 33km
 OFF EAST COAST OF HONSHU, JAPAN

1998-09-03

D 42.5

GRA1 13:26:17.4 i P d Z
 ALIGN 13:26:17.4 T1.1 A40
 GRA1 13:26:21.3 e (pP) Z
 GRA1 13:27:59.3 e (PP) Z
 GRA1 13:46:58.7 e L Z T20.2 A273 MS4.1
 NEIC: OT 13:18:22.7 38.4N 69.5E dep 33km mb5.1
 TAJIKISTAN

1998-09-03

D107.2

GRA1 17:52:17.0 e Pdiff c Z
 GRA1 17:56:03.0 e Z
 GRA1 17:56:24.6 e Z
 GRA1 17:56:41.1 e PP Z
 GRA1 18:39:03.1 e L Z T21.6 A14016 MS6.5
 SZGRF: OT 17:37:59.0 29.1S 71.4W dep 33km
 NEAR COAST OF CENTRAL CHILE

1998-09-03

D 60.5

GRA1 18:26:05.0 i P d Z mb5.2
 ALIGN 18:26:05.0 T0.9 A22
 GRA1 18:54:51.9 e L Z T18.5 A20941 MS6.3

1998-09-03

D 79.4

GRA1 20:34:04.0 e P Z mb4.8
 BEAM 20:34:04.0 T1.4 A15

 1998-09-03 D 70.9 AZ 81
 GRA1 23:12:37.6 e P Z mb4.5
 BEAM 23:12:37.6 T0.8 A4
 SZGRF: OT 23:01:23.8 20.2N 95.1E dep 33km
 BURMA

 1998-09-03 D 79.3 AZ 47
 GRA1 23:15:00.1 e P Z mb4.5
 BEAM 23:15:00.1 T1.0 A5
 GRA1 23:15:22.7 e pP Z
 GRA1 23:55:34.1 e L Z T20.8 A268 MS4.6
 SZGRF: OT 23:03:05.8
 SOUTH KOREA

 1998-09-03
 GRA1 23:27:46.3 e (Pn) Z
 GRA1 23:30:05.2 e (Sn) Z

 1998-09-04 D 23.4 AZ285
 GRA1 01:09:54.1 e P Z mb3.7
 BEAM 01:09:54.1 T1.1 A3
 GRA1 01:19:40.3 e L Z T18.3 A134 MS3.4
 SZGRF: OT 01:04:49.0
 NORTH ATLANTIC RIDGE

 1998-09-04 D 3.6 404km
 GRA1 07:40:58.5 e Pn Z M14.0
 GRA1 07:41:56.2 e Sg N
 SZGRF: OT 07:40:00.4 51.4N 16.2E dep 1km
 POLAND

 1998-09-04 D 84.3
 GRA1 10:53:28.4 e P Z mb4.5
 BEAM 10:53:28.4 T1.0 A3
 GRA1 11:35:06.4 e L Z T21.4 A56 MS3.9

 1998-09-04 D153.6
 GRA1 12:14:08.7 e PKPdf Z
 GRA1 12:14:18.0 e PKPbc Z
 GRA1 12:14:30.3 e PKPab Z
 GRA1 12:14:46.1 e pPKPab Z
 GRA1 13:27:43.7 e L Z T21.0 A288 MS5.1
 NEIC: OT 11:54:24.7 23.8S 175.8W dep 70km mb5.4
 TONGA ISLANDS REGION

 1998-09-04

GRA1 20:56:40.2 e PKP Z

1998-09-04 D 37.8
GRA1 23:58:32.0 e P Z mb4.2
BEAM 23:58:32.0 T1.0 A4
GRA1 23:58:42.3 e (pP) Z
GRA1 00:15:44.4 e L Z T21.1 A120 MS3.7

1998-09-05 D 43.8 AZ107
GRA1 00:49:51.9 e P Z mb4.1
BEAM 00:49:51.9 T1.1 A4
SZGRF: OT 00:41:49.6
GULF OF OMAN

1998-09-05 D150.3
GRA1 02:03:20.7 e PKPdf Z
GRA1 02:03:39.8 e (PKPab) Z
GRA1 03:17:29.7 e L Z T21.8 A405 MS5.2
NEIC: OT 01:43:26.2 54.6S 144.2E dep 10km mb4.9
WEST OF MACQUARIE ISLAND

1998-09-05
GRA1 03:22:44.5 e PKPdf Z
GRA1 04:45:04.6 e L Z T20.2 A166

1998-09-05
GRA1 03:25:26.9 e PKPdf Z

1998-09-05 D127.6
GRA1 05:35:20.6 i PKPdf c Z
GRA1 05:35:32.2 e pPKPdf Z
GRA1 05:37:21.5 e PP Z
GRA1 06:34:56.8 e L Z T22.0 A733 MS5.3

1998-09-05 D 73.0 AZ231
GRA1 05:48:45.7 e P Z T1.2 A10 mb4.8
NEIC: OT 05:35:13.5 30.4S 71.9W dep 54km mb4.5
NEAR COAST OF CENTRAL CHILE

1998-09-05 D124.2
GRA1 17:28:08.1 e PKPdf Z
GRA1 17:28:33.1 e pPKPdf Z
GRA1 17:29:52.4 e PP Z
GRA1 18:15:17.9 e L Z T21.8 A106 MS4.5

1998-09-05 D 57.6 AZ239
GRA1 23:57:52.9 e P Z mb4.4
BEAM 23:57:52.9 T1.1 A5
GRA1 00:17:28.5 e L Z T20.0 A80 MS3.8
SZGRF: OT 23:48:05.6 7.4N 35.9W dep 33km
CENTRAL MID-ATLANTIC RIDGE

1998-09-05 D 4.2 467km
GRA1 19:24:45.9 e Pg Z
GRA1 19:25:44.0 e Sg N
SZGRF: OT 19:23:30.3 47.3N 6.0E dep 10km
Besancon/F, Doubs Valley

1998-09-06 D 88.7 AZ 68
GRA1 00:45:53.4 i P c Z mb5.6
ALIGN 00:45:53.4 T2.0 A85
GRA1 00:46:02.1 i pP d Z
GRA1 01:27:20.2 e L Z T21.6 A346 MS4.7
SZGRF: OT 00:33:03.4 15.4N 117.6E dep 30km
PHILIPPINE ISLANDS REGION

1998-09-06
GRA1 02:49:52.9 e PKPdf Z
NEIC: OT 02:31:06.1 17.6S 178.6W dep500km mb4.5
FIJI ISLANDS REGION

1998-09-06
GRA1 18:16:39.7 e PKPdf Z
NEIC: OT 17:57:23.0 20.5S 177.1W dep300km mb4.5
FIJI ISLANDS REGION

1998-09-06 D 66.1 AZ 81
GRA1 21:45:57.6 e P Z mb4.7
BEAM 21:45:57.6 T1.1 A6
NEIC: OT 21:35:49.4 27.9N 86.9E dep 33km mb4.6
NEPAL

1998-09-06
GRA1 21:52:21.6 e (P) Z

1998-09-06
GRA1 22:46:47.3 e P Z

1998-09-07 D134.9
GRA1 00:42:23.0 e PKPdf Z

NEIC: OT 00:23:02.6 32.3S 111.9W dep 10km mb5.3
SOUTHERN EAST PACIFIC RISE

1998-09-07 D127.5
GRA1 00:58:36.6 e PKPdf Z
GRA1 01:47:26.5 e L Z T21.2 A2096 MS5.8

1998-09-07 D 3.7 406km
GRA1 02:09:50.0 e Pn Z M13.6
GRA1 02:10:49.4 e Sg N
SZGRF: OT 02:08:51.9 51.4N 16.2E dep 1km
POLAND

1998-09-07 D125.2
GRA1 02:54:02.0 e PKPdf Z
NEIC: OT 02:35:01.9 5.7S 152.0E dep 33km mb5.2
NEW BRITAIN REGION, P.N.G.

1998-09-07
GRA1 08:41:29.9 e (PKPab) Z

1998-09-07 D 59.7
GRA1 10:54:41.6 e P d Z mb4.5
BEAM 10:54:41.6 T1.0 A6
NEIC: OT 10:44:39.4 30.3N 88.2E dep 33km mb4.7
XIZANG

1998-09-07 D 83.9
GRA1 11:04:42.5 e P Z mb5.0
BEAM 11:04:42.5 T1.4 A13

1998-09-07 D 48.8 AZ 84
GRA1 12:39:35.5 e P Z mb5.0
BEAM 12:39:35.5 T1.4 A21
NEIC: OT 12:30:56.4 36.8N 71.5E dep 33km mb4.8
AFGHANISTAN-TAJIKISTAN BORD REG.

1998-09-08 D127.4
GRA1 04:16:53.7 e PKPdf d Z
NEIC: OT 03:57:49.8 6.8S 154.3E dep 33km mb4.7
SOLOMON ISLANDS

1998-09-08 D104.8
GRA1 09:28:14.5 e PP Z
GRA1 09:28:49.8 e Z
GRA1 10:16:01.1 e L Z T20.8 A434 MS5.0

NEIC: OT 09:10:03.0 13.3N 144.0E dep141km mb5.8
SOUTH OF MARIANA ISLANDS

1998-09-08 D 3.3 367km
GRA1 19:34:10.5 e Pn Z M13.4
GRA1 19:34:59.6 e Sg E
SZGRF: OT 19:33:16.9 51.0N 15.9E dep 1km
POLAND

1998-09-09 D 75.3 AZ 91
GRA1 01:41:28.9 e P Z mb4.6
BEAM 01:41:28.9 T1.5 A9
SZGRF: OT 01:29:48.7
ANDAMAN ISLANDS REGION

1998-09-09
GRA1 09:14:51.3 e PKPdf Z

1998-09-09 D 9.7
GRA1 11:30:26.8 e Pn Z
GRA1 11:32:16.4 e Sn Z
GRA1 11:35:55.7 e L Z T13.5 A23917 MS5.2

1998-09-09 D163.2
GRA1 16:36:16.4 e PKPdf Z
GRA1 16:36:39.0 e Z
GRA1 16:37:07.4 e PKPab Z
GRA1 16:40:50.5 e PP Z
GRA1 17:50:43.2 e L Z T20.3 A1269 MS5.8
NEIC: OT 16:16:08.9 65.6S 177.1W dep 10km mb5.0
PACIFIC-ANTARCTIC RIDGE

1998-09-09
GRA1 18:59:15.0 e Pn Z
GRA1 19:00:05.0 e Sn N
NEIC: OT 18:58:11.6 51.4N 16.0E dep 5km
POLAND

1998-09-09
GRA1 23:49:49.5 e PKPdf Z
GRA1 23:49:54.3 e (pPKPdf)Z
NEIC: OT 23:18:10.9 51.3N 178.8E dep 33km mb4.3
RAT ISLANDS, ALEUTIAN ISLANDS

1998-09-09 D 10.3
GRA1 11:30:28.9 e Pn Z
GRA1 11:32:14.0 e Sn N

GRA1 11:35:38.4 e L Z T11.1 A28025 MS5.4
 SZGRF: OT 11:28:01.8 40.0N 16.4E dep 10km
 SOUTHERN ITALY

 1998-09-10 D 3.7 412km
 GRA1 03:03:19.8 e Pn Z M14.0
 GRA1 03:04:19.1 e Sg N
 SZGRF: OT 03:02:21.2 51.5N 16.3E dep 1km
 POLAND

 1998-09-10
 GRA1 03:42:40.1 e PKPdf Z

 1998-09-10 D102.1
 GRA1 04:35:29.0 e Pdiff Z
 GRA1 04:35:44.7 e pPdiff Z
 GRA1 05:25:54.5 e L Z T19.8 A156 MS4.5

 1998-09-10 D 80.9 AZ 28
 GRA1 20:20:29.5 e P Z mb4.6
 BEAM 20:20:29.5 T1.4 A8
 SZGRF: OT 20:08:19.9
 KURIL ISLANDS REGION

 1998-09-10 D 68.8 AZ 81
 GRA1 23:07:44.2 e P Z mb5.0
 BEAM 23:07:44.2 T1.7 A15
 SZGRF: OT 22:56:44.0
 BURMA

 1998-09-11 D 46.8 AZ 81
 GRA1 06:01:49.6 e P Z mb4.8
 BEAM 06:01:49.6 T1.5 A12
 SZGRF: OT 05:53:23.6
 NORTHWESTERN KASHMIR

 1998-09-11 D 53.2 AZ 80
 GRA1 06:52:03.9 e P Z mb4.5
 BEAM 06:52:03.9 T1.6 A10
 SZGRF: OT 06:42:49.5
 TIBET

 1998-09-12 D 78.2 AZ 26
 GRA1 03:07:25.3 i P c Z mb5.1
 ALIGN 03:07:25.3 T1.1 A19
 GRA1 03:07:30.5 e Z
 GRA1 03:08:13.9 e pP Z

GRA1 03:08:19.6 e (pX) Z
 NEIC: OT 02:55:50.0 46.9N 150.9E dep201km mb4.9
 KURIL ISLANDS

 1998-09-12

GRA1 09:18:02.8 e P Z
 GRA1 09:21:21.6 e pP Z
 GRA1 09:22:28.0 e sP Z
 GRA1 09:27:47.6 e PP Z

 1998-09-12

GRA1 09:49:59.6 e Pn Z
 GRA1 09:51:21.0 e (Sn) Z
 NEIC: OT 09:48:08.1 44.1N 12.7E dep 2km
 NORTHERN ITALY

 1998-09-12 D 96.6

GRA1 11:11:26.8 i P d Z mb5.6
 BEAM 11:11:26.8 T1.5 A25
 GRA1 11:11:51.5 e pP Z
 GRA1 11:50:35.0 e L Z T21.6 A185 MS4.5

 1998-09-12 D 80.0 AZ 25

GRA1 17:08:14.3 e P Z mb4.9
 BEAM 17:08:14.3 T1.0 A18
 GRA1 17:08:29.1 e pP Z
 SZGRF: OT 16:56:12.6 45.5N 154.7E dep 52km
 KURIL ISLANDS REGION

 1998-09-12 D 79.6 AZ356

GRA1 23:30:04.0 e P Z mb4.3
 BEAM 23:30:04.0 T1.0 A4
 SZGRF: OT 23:18:01.7 50.9N 162.4W dep 33km
 SOUTH OF ALASKA

 1998-09-13 D 85.1 AZ 56

GRA1 05:47:17.6 i P c Z mb5.4
 ALIGN 05:47:17.6 T1.2 A30
 GRA1 05:47:44.7 e pP Z
 GRA1 05:47:53.7 e sP Z
 GRA1 06:30:04.4 e L Z T19.2 A408 MS4.8
 SZGRF: OT 05:34:54.1 25.6N 125.5E dep101km
 SOUTHWESTERN RYUKYU ISLANDS

 1998-09-13 D 3.6 402km

GRA1 23:24:14.9 e Pn Z M13.4
 GRA1 23:25:12.9 e Sg E

SZGRF: OT 23:23:17.9 51.5N 16.1E dep 1km
POLAND

1998-09-14 D 3.6 405km
GRA1 00:01:22.3 e Pn Z M13.5
GRA1 00:02:21.5 e Sg N

1998-09-14 D 5.3
GRA1 03:34:51.6 e Pn Z M14.0
GRA1 03:35:52.5 e Sn E

SZGRF: OT 03:33:33.7 44.4N 10.7E dep 10km
NORTHERN ITALY

1998-09-14 D133.7
GRA1 05:02:52.8 e PKPdf Z
GRA1 05:54:15.2 e L Z T21.3 A661 MS5.3

NEIC: OT 04:43:28.5 34.9S 107.9W dep 10km mb4.9
SOUTHERN EAST PACIFIC RISE

1998-09-14 D 11.3
GRA1 05:27:35.3 e P Z
GRA1 05:32:16.3 e L Z T18.3 A3116 MS4.3

1998-09-14 D 4.4 491km
GRA1 10:22:25.5 e (Pn) Z
GRA1 10:23:28.2 e (Sn) N

1998-09-14 D152.5
GRA1 10:27:52.1 e (PKPdf) Z
GRA1 10:27:58.9 e PKPbc Z
GRA1 10:28:07.4 e PKPab Z
NEIC: OT 10:09:09.3 20.8S 178.6W dep550km mb4.4
FIJI ISLANDS REGION

1998-09-14 D 56.9 AZ 71
GRA1 15:45:20.9 e P Z mb4.6
BEAM 15:45:20.9 T1.1 A8
GRA1 15:45:25.1 e pP Z
NEIC: OT 15:36:38.5 41.1N 81.4E dep 33km mb4.7
SOUTHERN XINJIANG, CHINA

1998-09-14 D 78.4 AZ 3
GRA1 23:28:48.2 i P c Z mb6.0
ALIGN 23:28:48.2 T1.2 A150
GRA1 23:29:02.8 e Z
GRA1 23:29:32.8 e pP Z

GRA1 23:29:47.5 e sP Z
 GRA1 23:38:52.0 e S Z
 GRA1 23:44:08.3 e SS R
 GRA1 00:13:20.7 e L Z T18.4 A5801 MS5.9
 SZGRF: OT 23:17:09.2 52.2N 173.0W dep176km
 ANDREANOF ISLANDS, ALEUTIAN IS.

1998-09-14 D 2.4 272km
 GRA1 09:08:27.0 e Pg Z M13.0
 GRA1 09:08:57.3 e Sg E
 SZGRF: OT 09:07:41.8 48.3N 8.2E dep 10km
 Haslach/Black Forest, N of Freiburg

1998-09-15 D 79.8 AZ 38
 GRA1 07:36:21.6 i P c Z mb5.1
 ALIGN 07:36:21.6 T1.7 A41
 GRA1 07:36:25.5 e Z
 GRA1 07:36:55.0 e (pP) Z
 GRA1 07:37:05.6 e sP Z
 GRA1 08:16:16.7 e L Z T18.2 A249 MS4.6
 SZGRF: OT 07:24:29.1 40.0N 139.7E dep128km
 NEAR WEST COAST OF HONSHU, JAPAN

1998-09-15 D124.6
 GRA1 08:54:42.9 e PKPdf Z
 GRA1 09:49:06.1 e L Z T22.0 A7436 MS6.3
 NEIC: OT 08:35:45.4 5.5S 151.6E dep 33km mb5.7
 NEW BRITAIN REGION, P.N.G.

1998-09-15
 GRA1 10:07:00.4 e PKPdf Z
 NEIC: OT 09:48:02.1 5.5S 151.7E dep 33km mb4.9
 NEW BRITAIN REGION, P.N.G.

1998-09-15 D 40.5 AZ132
 GRA1 18:55:20.4 e P Z
 GRA1 19:07:34.4 e L Z T18.4 A163 MS3.9
 NEIC: OT 18:50:27.6 34.6N 32.3E dep 10km mb4.5
 CYPRUS REGION

1998-09-15 D 18.8 AZ145
 GRA1 22:57:40.8 i P c Z mb3.8
 BEAM 22:57:40.8 T0.9 A6
 GRA1 23:05:16.8 e L Z T18.4 A152 MS3.3
 SZGRF: OT 22:53:23.7
 MEDITERRANEAN SEA

1998-09-16 D 3.6 404km

GRA1 00:33:55.3 e Pn Z M13.5
GRA1 00:34:53.4 e Sg E
SZGRF: OT 00:32:58.1 51.3N 16.3E dep 1km
POLAND

1998-09-16 D127.5
GRA1 02:30:59.6 e PKPdf c Z
GRA1 03:29:48.1 e L Z T21.9 A362 MS5.0

1998-09-16
GRA1 20:21:48.1 i PKPab c Z

1998-09-17 D 81.5 AZ 51
GRA1 04:15:03.8 e P Z mb5.1
BEAM 04:15:03.8 T1.5 A22
GRA1 04:15:21.3 e pP Z
GRA1 04:15:46.0 e Z
GRA1 04:55:19.2 e L Z T21.1 A425 MS4.8
SZGRF: OT 04:02:54.5
EAST CHINA SEA

1998-09-17 D 4.4 487km
GRA1 05:31:05.9 e Pg Z M14.3
GRA1 05:32:05.2 e Sg Z
SZGRF: OT 05:29:46.4 46.1N 14.9E dep 10km
YUGOSLAVIA

1998-09-17
GRA1 07:02:07.5 e PKPab Z

1998-09-17
GRA1 09:00:59.9 e PKPdf Z
GRA1 09:01:15.3 e pPKPdf Z

1998-09-17
GRA1 11:32:32.3 e (Pn) Z
GRA1 11:33:55.3 e (Sn) N
NEIC: OT 11:30:43.8 43.3N 16.5E dep 10km mb5.0
NORTHWESTERN BALKAN REGION

1998-09-17 D126.5
GRA1 17:00:25.2 e PKPdf Z
GRA1 17:51:27.4 e L Z T21.9 A956 MS5.4

1998-09-18 D 3.2 351km
GRA1 00:00:58.6 e Pn Z M13.2
GRA1 00:01:49.2 e Sg N

1998-09-18 D 45.5 AZ 73
GRA1 02:59:59.9 i P c Z mb4.8
BEAM 02:59:59.9 T1.3 A12
GRA1 03:00:02.6 e Z
GRA1 03:00:06.0 e Z
GRA1 03:19:53.3 e L Z T20.8 A169 MS4.0
SZGRF: OT 02:51:44.3 42.1N 77.8E dep 33km
ALMA-ATA REGION

1998-09-18 D 48.7 AZ 73
GRA1 04:01:43.5 i P c Z mb5.1
ALIGN 04:01:43.5 T1.6 A34
GRA1 04:21:48.6 e L Z T20.0 A245 MS4.2
NEIC: OT 03:53:15.5 40.6N 78.1E dep 33km mb4.8
SOUTHERN XINJIANG, CHINA

1998-09-18 D 80.0
GRA1 04:03:24.7 e P Z
GRA1 04:03:27.8 e Z
GRA1 04:03:37.9 e (pP) Z
GRA1 04:43:24.5 e L Z T19.6 A240 MS4.5

1998-09-18 D 76.3 AZ 44
GRA1 08:28:37.5 e P Z mb4.7
BEAM 08:28:37.5 T1.4 A8
GRA1 08:29:09.8 e (pP) Z
GRA1 09:10:46.9 e L Z T19.7 A168 MS4.4
NEIC: OT 08:16:14.8 36.7N 137.9E dep 10km mb3.8
EASTERN HONSHU, JAPAN

1998-09-18 D 46.2 AZ234
GRA1 13:55:37.6 i P c Z mb5.3
BEAM 13:55:37.6 T1.2 A35
GRA1 14:10:57.5 e L Z T20.7 A111 MS3.8
SZGRF: OT 13:47:12.2 14.6N 25.9W dep 10km
NORTH ATLANTIC OCEAN

1998-09-19 D149.8
GRA1 13:22:31.6 e (PKPdf) Z
GRA1 13:22:41.5 e PKPab Z
NEIC: OT 13:03:22.6 20.2S 178.3W dep300km mb4.7
FIJI ISLANDS REGION

1998-09-19 D 75.3
 GRA1 14:37:24.7 e P Z mb4.3
 BEAM 14:37:24.7 T1.5 A5

 1998-09-19 D 20.4 AZ149
 GRA1 20:16:43.6 e P Z T1.4 A13 mb3.9
 GRA1 20:16:53.9 e (pP) Z
 SZGRF: OT 20:12:09.9
 NEAR COAST OF LIBYA

 1998-09-19 D 43.1 AZ103
 GRA1 21:24:19.9 i P c Z mb4.5
 ALIGN 21:24:19.9 T1.2 A12
 GRA1 21:39:37.9 e L Z T18.8 A56 MS3.5
 NEIC: OT 21:17:13.7 32.4N 55.0E dep 33km mb4.3
 NORTHERN IRAN

 1998-09-19 D147.9
 GRA1 23:56:40.5 e PKPdf Z
 GRA1 23:56:44.7 e PKPab Z
 NEIC: OT 23:37:51.9 17.8S 178.3W dep500km mb4.4
 FIJI ISLANDS REGION

 1998-09-20 D151.4
 GRA1 00:56:24.2 e PKPdf Z
 GRA1 00:56:29.5 e pPKPdf Z
 GRA1 00:56:30.9 e PKPbc Z
 GRA1 00:56:35.7 e pPKPbc Z
 GRA1 00:56:42.0 e pPKPab Z
 GRA1 02:07:14.3 e L Z T20.4 A330 MS5.1
 NEIC: OT 00:36:51.0 21.4S 174.8W dep142km mb4.9
 TONGA ISLANDS Scalar Moment (PPT):

 1998-09-20 D 1.8 198km
 GRC1 02:53:21.6 e Pn Z M13.1
 GRA1 02:53:31.0 e Pn Z M13.5
 GRA1 02:54:00.5 e Sn N
 GRA1 02:54:11.0 e Sg N
 SZGRF: OT 02:52:51.4 47.2N 11.4E dep 10km
 Innsbruck, Hall/A

 1998-09-20 D164.2
 GRA1 06:50:43.6 e PKPdf Z
 GRA1 06:51:35.6 e PKPab Z
 GRA1 08:01:46.2 e L Z T19.8 A348 MS5.2
 NEIC: OT 06:30:50.0 35.5S 179.9E dep 70km mb5.2
 OFF E. COAST OF N. ISLAND, N.Z.

1998-09-20 D164.3
 GRA1 07:34:25.8 e PKPdf Z
 GRA1 07:34:35.7 e pPKPdf Z
 GRA1 07:35:18.2 e PKPab Z
 GRA1 07:35:30.2 e pPKPab Z
 GRA1 08:59:08.1 e L Z T20.1 A495 MS5.4
 NEIC: OT 07:14:32.6 35.5S 180.0E dep 70km mb5.2
 OFF E. COAST OF N. ISLAND, N.Z.

1998-09-20 D148.8
 GRA1 12:07:48.1 e PKPdf Z
 GRA1 12:07:51.5 e PKPbc Z
 GRA1 12:07:54.6 e PKPab Z
 NEIC: OT 11:49:14.6 17.7S 178.9W dep625km mb4.3
 FIJI ISLANDS REGION

1998-09-20 D149.7
 GRA1 14:59:23.3 e PKPdf Z
 GRA1 14:59:26.1 e PKPbc Z
 GRA1 14:59:32.7 e PKPab Z
 NEIC: OT 14:40:15.4 13.9S 167.0E dep100km mb5.0
 VANUATU ISLANDS

1998-09-20 D149.8
 GRA1 15:02:53.1 e PKPdf Z
 GRA1 15:02:58.5 e PKPbc Z
 GRA1 15:03:01.5 e PKPab Z

1998-09-20 D 77.7 AZ 5
 GRA1 16:28:03.0 i P c Z mb5.3
 ALIGN 16:28:03.0 T1.5 A35
 GRA1 16:28:32.6 e pP Z
 GRA1 16:28:42.3 e sP Z
 GRA1 17:06:57.8 e L Z T21.3 A227 MS4.5
 SZGRF: OT 16:16:21.0 52.8N 177.2W dep112km
 ANDREANOF ISLANDS, ALEUTIAN IS.

1998-09-20
 GRA1 21:35:32.6 i PKPab c Z
 GRA1 21:39:36.0 i PP c Z
 GRA1 22:24:41.1 e L Z T21.9 A234

1998-09-20 D147.0
 GRA1 23:10:45.9 e PKPdf Z
 GRA1 23:10:49.1 i PKPbc d Z
 GRA1 23:10:53.1 e PKPab Z
 GRA1 23:12:59.7 e pPKPbc Z


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1998-09-21      D 86.3  AZ 39
  GRA1 03:41:27.7 e P      Z
SZGRF: OT 03:28:50.0
  OFF EAST COAST OF HONSHU, JAPAN
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1998-09-21      D103.3
  GRA1 07:06:26.1 e Pdiff c Z
  GRA1 07:07:03.2 e pPdiff Z
  GRA1 07:09:53.5 e      Z
  GRA1 07:10:27.4 e      Z
  GRA1 07:10:45.7 e PP    Z
  GRA1 07:11:18.9 e pPP   Z
  GRA1 07:22:21.3 e PKKPbc Z
  GRA1 07:22:41.9 e pPKKPbc Z
  GRA1 07:56:07.2 e L      Z T21.1 A608      MS5.1
NEIC:  OT 06:52:41.4 .3N 122.5E dep149km mb6.1
  MINAHASSA PENINSULA, SULAWESI
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1998-09-21      D138.6
  GRA1 12:28:55.6 e PKPdf  Z
  GRA1 12:29:03.9 e      Z
  GRA1 12:31:52.8 e PP    Z
  GRA1 12:32:36.3 e pPP   Z
  GRA1 13:32:03.6 e L      Z T22.0 A4354      MS6.2
NEIC:  OT 12:09:40.2 13.5S 166.8E dep 33km mb5.9
  VANUATU ISLANDS
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1998-09-21      D 76.3
  GRA1 13:11:08.4 i P      c Z      mb4.7
  BEAM 13:11:08.4      T0.9 A6
NEIC:  OT 13:00:00.7 48.4N 148.7E dep361km mb4.3
  NORTHWEST OF KURIL ISLANDS
-----
1998-09-21      D 36.3  AZ108
  GRA1 21:42:20.1 i P      c Z      mb5.5
  ALIGN 21:42:20.1      T1.1 A100
  GRA1 21:47:58.0 e S      Z
  GRA1 22:02:08.3 e L      Z T21.4 A369      MS4.1
SZGRF: OT 21:35:20.1 29.8N 51.5E dep 33km
  SOUTHERN IRAN
-----
1998-09-21      D 91.1  AZ108
  GRA1 21:48:36.8 e P      Z      mb5.1
  ALIGN 21:48:36.8      T1.1 A12
SZGRF: OT 21:35:34.5
  SOUTH INDIAN OCEAN
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1998-09-22 D 55.0 AZ 79
GRA1 01:16:25.9 e P Z mb4.6
ALIGN 01:16:25.9 T0.9 A6
SZGRF: OT 01:06:58.4 32.9N 83.9E dep 33km
TIBET

1998-09-22 D 87.8 AZ 48
GRA1 01:31:07.5 i P c Z mb5.1
ALIGN 01:31:07.5 T1.3 A12
GRA1 02:23:54.0 e L Z T19.3 A7643 MS6.1
SZGRF: OT 01:18:22.5 27.8N 134.3E dep 33km
EAST OF RYUKYU ISLANDS

1998-09-22
GRA1 07:06:05.7 e PKPdf Z
GRA1 07:58:18.9 e L Z T21.2 A91
NEIC: OT 06:47:00.8 7.2S 155.5E dep 33km mb4.9
SOLOMON ISLANDS

1998-09-22 D 79.1 AZ 28
GRA1 09:35:06.5 e P Z mb4.9
ALIGN 09:35:06.5 T1.1 A12
GRA1 09:35:19.8 e (pP) Z
GRA1 10:13:48.4 e L Z T20.7 A151 MS4.3
SZGRF: OT 09:23:08.9 45.3N 150.9E dep 46km
KURIL ISLANDS

1998-09-22
GRA1 18:40:28.9 e PKPdf Z
NEIC: OT 18:19:52.7 32.4S 71.4W dep 42km
NEAR COAST OF CENTRAL CHILE

1998-09-22 D 75.5 AZ142
GRA1 19:39:19.2 e P c Z mb5.0
ALIGN 19:39:19.2 T0.8 A9
GRA1 19:39:28.6 e (pP) Z
GRA1 19:39:33.8 e (sP) Z
GRA1 20:21:50.8 e L Z T19.0 A98 MS4.1

1998-09-22 D 3.6 403km
GRA1 19:57:19.5 e Pn Z M13.5
GRA1 19:58:18.0 e Sg E
SZGRF: OT 19:56:22.5 51.4N 16.2E dep 1km
POLAND

1998-09-22 D 8.5
GRA1 23:25:51.3 e Pn Z
GRA1 23:27:10.7 e (SnI) Z

GRA1 23:28:11.5 e Sg Z M14.7

 1998-09-22 D 1.1 119km
 GRA1 11:00:23.2 e Pg Z M12.5
 GRA1 11:00:39.3 e Sg N
 SZGRF: OT 11:00:03.8 50.2N 12.7E dep 1km
 Karlovy Vary/CR

 1998-09-23 D 80.2 AZ 26
 GRA1 01:33:07.7 i P d Z mb4.9
 ALIGN 01:33:07.7 T1.0 A15
 SZGRF: OT 01:21:02.2 45.1N 153.9E dep 33km
 KURIL ISLANDS REGION

 1998-09-23 D 8.3
 GRA1 04:30:02.6 e Pn Z
 GRA1 04:31:34.9 e Sn Z
 GRA1 04:31:50.2 e Sg Z
 NEIC: OT 04:27:45.3 41.7N 15.8E dep 10km
 SOUTHERN ITALY

 1998-09-23 D 78.8 AZ 8
 GRA1 15:47:32.5 e P Z mb4.5
 BEAM 15:47:32.5 T0.9 A5
 NEIC: OT 15:36:10.3 55.9N 161.9E dep 33km mb5.0
 NEAR EAST COAST OF KAMCHATKA

 1998-09-23
 GRA1 16:08:37.6 e PKPdf d Z

 1998-09-23 D 17.6 AZ147
 GRA1 20:44:43.8 e P Z mb3.6
 BEAM 20:44:43.8 T1.1 A6
 GRA1 21:00:09.8 e L Z T20.2 A204 MS3.4
 NEIC: OT 20:41:08.9 37.0N 21.3E dep 10km mb5.6
 SOUTHERN GREECE

 1998-09-24 D 78.1 AZ 3
 GRA1 02:12:46.1 e P Z mb4.8
 BEAM 02:12:46.1 T1.3 A10
 SZGRF: OT 02:00:52.1 52.5N 173.1W dep 33km
 ANDREANOF ISLANDS, ALEUTIAN IS.

 1998-09-24 D 50.8 AZ 81
 GRA1 03:51:33.9 e P Z mb4.5
 BEAM 03:51:33.9 T0.9 A5
 GRA1 03:51:47.0 e (pP) Z

SZGRF: OT 03:42:39.6

KASHMIR-TIBET BORDER REGION

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1998-09-24      D 4.2  470km
  GRA1 04:00:12.8 e Pn      Z          M13.9
  GRA1 04:01:22.0 e Sg      E
SZGRF: OT 03:59:08.2 46.2N 14.8E dep 10km

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YUGOSLAVIA

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1998-09-24      D 23.2  AZ348
  GRA1 08:18:05.4 e P      d Z          mb4.6
  ALIGN 08:18:05.4          T1.6  A34
NEIC:  OT 08:14:03.8 16.7S 174.3W dep 33km mb4.6

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TONGA ISLANDS

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1998-09-24      D 60.6  AZ 53
  GRA1 19:03:42.6 i P      c Z          mb5.8
  ALIGN 19:03:42.6          T1.1  A164
  GRA1 19:03:54.5 e pP     d Z
  GRA1 19:05:54.9 e PP     Z
  GRA1 19:11:54.0 e S      Z
  GRA1 19:31:01.8 e L      Z  T18.3  A4202  MS5.6
SZGRF: OT 18:53:38.2 45.9N 107.9E dep 43km

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MONGOLIA

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1998-09-24      D 82.6  AZ 37
  GRA1 22:11:50.5 i P      d Z          mb5.1
  ALIGN 22:11:50.5          T1.1  A14
  GRA1 22:12:11.9 e pP     Z
SZGRF: OT 21:59:37.9 38.0N 142.2E dep 80km

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OFF EAST COAST OF HONSHU, JAPAN

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1998-09-24
  ALIGN 19:03:27.2 e P      Z  T1.1  A124  mb5.8
  GRA1 19:03:42.6 i P      c Z  T1.1  A286  mb6.2
  GRA1 19:03:55.0 e pP     Z
  GRA1 19:11:52.2 e S      E
  GRA1 19:31:03.6 e L      Z  T20.6  A3399  MS5.5
SZGRF: OT 18:53:39.3 45.3N 106.8E dep 44km

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MONGOLIA

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1998-09-25      D 24.0  AZ100
  GRA1 14:05:01.2 e P      Z          mb4.1
  BEAM 14:05:01.2          T0.9  A6
  GRA1 14:05:05.8 e (pP)   Z
SZGRF: OT 13:59:47.2

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TURKEY-USSR BORDER REGION

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1998-09-25      D 61.0  AZ301

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GRA1 20:03:06.4 i P c Z mb4.6
ALIGN 20:03:06.4 T1.0 A9
GRA1 20:27:34.1 e L Z T19.9 A222 MS4.3
SZGRF: OT 19:52:52.0 41.3N 80.6W dep 5km
OHIO

1998-09-25 D 60.2 AZ206
GRA1 20:12:44.0 e P Z mb4.4
BEAM 20:12:44.0 T1.0 A4
GRA1 20:12:50.5 e pP Z
SZGRF: OT 20:02:36.3 7.4S 11.6W dep 23km
ASCENSION ISLAND REGION

1998-09-25 D 3.6 399km
GRA1 21:29:59.3 e Pn Z M13.8
GRA1 21:30:56.0 e Sg E
SZGRF: OT 21:29:02.5 51.5N 16.1E dep 1km
POLAND

1998-09-26
GRA1 04:56:08.4 e (PKPab) Z

1998-09-26 D127.7
GRA1 11:16:16.5 i PKPdf d Z
GRA1 11:17:07.0 e pPKPdf Z
NEIC: OT 10:57:33.8 6.5S 155.8E dep204km mb5.2
SOLOMON ISLANDS

1998-09-26 D 38.0 AZ 83
GRA1 12:56:09.8 e P Z mb3.9
BEAM 12:56:09.8 T1.0 A2
GRA1 12:56:13.2 e (pP) Z
SZGRF: OT 12:48:53.4
UZBEK SSR

1998-09-26
GRA1 18:08:43.2 e PKPdf Z

1998-09-26 D 64.5
GRA1 18:37:39.4 i P c Z mb5.5
BEAM 18:37:39.4 T1.1 A35
GRA1 18:37:45.5 e pP Z
GRA1 18:40:02.3 e Z
GRA1 19:07:12.8 e L Z T24.6 A222 MS4.3

1998-09-27 D 69.0 AZ350
GRA1 01:08:53.7 e P Z mb5.1

ALIGN 01:08:53.7 T1.0 A11
GRA1 01:09:06.2 e pP Z
GRA1 01:39:58.3 e L Z T19.6 A73 MS3.9
SZGRF: OT 00:57:54.9 60.6N 149.8W dep 44km
KENAI PENINSULA, ALASKA

1998-09-27

GRA1 04:35:29.5 e PKPdf Z

1998-09-27 D 56.6 AZ 72

GRA1 06:44:42.3 e P Z mb4.8
BEAM 06:44:42.3 T1.6 A18
GRA1 07:13:23.7 e L Z T19.7 A105 MS3.9
SZGRF: OT 06:35:04.0
SOUTHERN SINKIANG PROV., CHINA

1998-09-27 D 85.7 AZ 38

GRA1 09:46:11.8 i P d Z mb4.8
ALIGN 09:46:11.8 T1.1 A9
GRA1 09:46:21.8 e (pP) Z
SZGRF: OT 09:33:37.6 34.5N 142.4E dep 34km
OFF EAST COAST OF HONSHU, JAPAN

1998-09-27 D 83.8 AZ 39

GRA1 10:31:14.3 e P Z mb4.7
BEAM 10:31:14.3 T1.4 A7
GRA1 10:31:24.8 e pP Z
GRA1 10:59:02.6 e L Z T21.6 A88 MS4.1
SZGRF: OT 10:18:49.7 35.8N 140.8E dep 36km
NEAR EAST COAST OF HONSHU, JAPAN

1998-09-27 D150.1

GRA1 11:26:38.4 e PKPdf Z
GRA1 11:26:43.8 e PKPbc Z
GRA1 11:26:50.4 e PKPab Z
GRA1 11:27:38.9 e pPKPab Z
GRA1 11:30:15.9 e PP Z
SZGRF: OT 11:07:16.0 20.2S 175.9W dep208km
TONGA ISLANDS

1998-09-27 D 85.3 AZ 50

GRA1 11:47:09.0 e P Z mb5.2
ALIGN 11:47:09.0 T1.5 A24
GRA1 11:47:25.6 e pP Z
GRA1 11:47:33.7 e sP Z
GRA1 12:28:08.3 e L Z T21.2 A982 MS5.2
NEIC: OT 11:07:16.1 20.2S 176.0W dep208km mb5.0
TONGA ISLANDS

 1998-09-28 D 1.8 196km
 GRC1 00:09:07.3 e Pn Z M12.1
 GRA1 00:09:10.2 e Pn Z M12.3
 GRA1 00:09:36.0 e Sg E
 SZGRF: OT 00:08:36.3 48.5N 9.0E dep 10km
 Rottenburg, SW of Tuebingen

1998-09-28 D 3.4 383km
 GRA1 03:13:46.3 e Sg N
 SZGRF: OT 03:11:57.1 51.4N 15.9E dep 1km
 POLAND

1998-09-28 D 84.3 AZ 50
 GRA1 06:24:10.1 e P Z mb5.0
 ALIGN 06:24:10.1 T1.1 A12
 NEIC: OT 06:11:43.9 28.5N 129.3E dep100km mb4.6
 RYUKYU ISLANDS

1998-09-28
 GRA1 07:48:40.9 e PKPab Z
 GRA1 08:52:38.3 e L Z T21.7 A180
 NEIC: OT 07:29:06.7 16.5S 177.2E dep 33km mb5.1
 FIJI ISLANDS

1998-09-28 D 3.6 403km
 GRA1 10:56:20.0 e Pn Z M14.0
 GRA1 10:57:18.5 e Sg E
 SZGRF: OT 10:55:22.4 51.5N 16.2E dep 1km
 POLAND

1998-09-28 D103.2
 GRA1 13:48:14.9 e Pdiff Z
 GRA1 13:48:19.2 e Z
 GRA1 13:48:25.3 e Z
 GRA1 13:48:30.0 e Z
 GRA1 13:51:27.3 e Z
 GRA1 13:52:29.1 e PP Z
 GRA1 13:54:46.7 e (SP) Z
 GRA1 13:58:40.1 e SKS E
 GRA1 14:45:24.4 e L Z T20.7 A2576 MS5.7
 NEIC: OT 13:34:29.7 8.2S 112.5E dep153km mb6.3
 JAWA, INDONESIA

1998-09-28 D 15.0 AZ145
 GRA1 16:57:27.1 e P Z
 NEIC: OT 16:53:05.2 34.9N 27.5E dep 33km mb3.9
 EASTERN MEDITERRANEAN SEA

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1998-09-28      D 38.3  AZ100
  GRA1 17:32:43.3 e P      Z      mb4.4
  BEAM 17:32:43.3                T1.7  A12
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1998-09-28      D103.1
  GRA1 19:37:20.0 e Pdiff  Z
  GRA1 19:41:47.4 e PP     Z
  GRA1 20:28:40.3 e L      Z  T21.1  A5005  MS6.0
NEIC: OT 19:23:23.1 3.8N 126.3E dep 33km mb5.8
  TALAUD ISLANDS, INDONESIA
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1998-09-28      D 74.0  AZ 77
  GRA1 21:41:39.4 i P      c Z      mb4.7
  ALIGN 21:41:39.4                T1.0  A9
  GRA1 21:41:45.5 e pP     Z
  GRA1 21:41:48.8 e sP     Z
NEIC: OT 21:31:06.8 27.9N 92.5E dep 33km mb4.7
  EASTERN XIZANG-INDIA BORDER REG.
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1998-09-28      D 83.8  AZ230
  GRA1 23:29:11.4 e P      Z      mb4.3
  BEAM 23:29:11.4                T0.7  A2
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1998-09-29      D 23.9  AZ106
  GRA1 00:16:54.0 e P      Z      mb4.2
  ALIGN 00:16:54.0                T1.6  A14
NEIC: OT 00:09:43.8 29.4N 51.3E dep 10km mb4.4
  SOUTHERN IRAN
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1998-09-29      D147.8
  GRA1 00:39:23.2 e PKPdf  Z
  GRA1 00:39:27.5 i PKPbc  c Z
  GRA1 00:39:30.0 e PKPab  Z
NEIC: OT 00:20:12.8 17.4S 178.8W dep216km mb4.3
  FIJI ISLANDS REGION
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1998-09-29      D 79.0  AZ 13
  GRA1 01:13:43.8 e P      Z  T0.9  A4      mb4.4
  GRA1 01:13:47.0 e (pP)   Z
SZGRF: OT 01:01:44.7
  ALEUTIAN ISLANDS REGION
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1998-09-29      D 50.2  AZ103
  GRA1 01:26:26.3 i P      d Z      mb4.7
  ALIGN 01:26:26.3                T1.1  A10
NEIC: OT 01:17:39.2 24.9N 66.6E dep 33km mb4.6
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PAKISTAN

1998-09-29 D 26.0 AZ264
GRA1 03:29:44.1 i P c Z mb4.6
ALIGN 03:29:44.1 T1.2 A20
GRA1 03:29:59.0 e pP Z
GRA1 03:30:05.1 e sP Z
GRA1 03:40:55.5 e L Z T21.0 A452 MS4.0
SZGRF: OT 03:24:17.6 41.1N 24.0W dep 59km
AZORES ISLANDS REGION

1998-09-29
GRA1 09:17:51.5 e PKPab Z
GRA1 09:18:10.3 e (pPKPab)Z

1998-09-29 D 42.4
GRA1 17:56:01.7 e P Z mb4.7
BEAM 17:56:01.7 T1.8 A25
NEIC: OT 17:48:08.3 41.2N 72.0E dep 45km mb4.7
KYRGYZSTAN

1998-09-29
GRA1 22:31:08.6 e Pn Z
GRA1 22:32:57.9 e (Sg) Z
NEIC: OT 22:28:51.7 44.2N 20.2E dep 10km
NORTHWESTERN BALKAN REGION

1998-09-29
GRA1 22:36:09.8 e Pn Z
GRA1 22:38:03.7 e Sg Z
NEIC: OT 22:34:09.0 44.2N 20.0E dep 10km
NORTHWESTERN BALKAN REGION

1998-09-29 D 9.6
GRC3 22:16:40.5 e Pn Z
GRA1 22:16:49.9 e Pn Z
SZGRF: OT 22:14:02.4 42.5N 22.0E dep 10km
YUGOSLAVIA

1998-09-30 D 15.0 AZ157
GRA1 00:21:46.0 i P c Z

1998-09-30 D 59.2
GRA1 02:39:57.7 e P Z mb5.2
ALIGN 02:39:57.7 T1.5 A42
GRA1 03:06:41.6 e L Z T20.2 A462 MS4.6
NEIC: OT 02:29:56.3 30.1N 88.1E dep 33km mb5.2

XIZANG

1998-09-30 D142.7
GRA1 03:23:23.2 e PKPdf Z
GRA1 03:26:41.3 e PP Z
GRA1 04:26:56.6 e L Z T21.7 A719 MS5.4
NEIC: OT 03:03:56.5 17.3S 167.9E dep 33km mb5.5
VANUATU ISLANDS

1998-09-30 D 79.3 AZ358
GRA1 05:27:29.5 i P c Z mb5.0
ALIGN 05:27:29.5 T1.0 A14
GRA1 05:27:40.4 e (pP) Z
SZGRF: OT 05:15:29.7 51.4N 165.0W dep 38km
ALEUTIAN ISLANDS REGION

1998-09-30 D 2.5 277km
GRA1 05:54:18.8 e Pn Z M13.0
GRA1 05:54:57.5 e Sg N
SZGRF: OT 05:53:38.4 47.2N 11.3E dep 10km
Inn Valley/A, W of Innsbruck

1998-09-30
GRA1 08:31:28.5 e PKPdf Z

1998-09-30
GRA1 12:19:27.9 e PKPab Z

1998-09-30
GRA1 12:45:57.4 i PKPdf c Z
GRA1 13:45:57.4 e L Z T20.7 A703
NEIC: OT 12:26:59.0 4.6S 153.2E dep 33km mb5.3
NEW IRELAND REGION, P.N.G.

1998-09-30
GRA1 19:21:39.7 i PKPdf d Z

1998-09-30 D 10.0
GRA1 23:45:21.1 e Pn Z
GRA1 23:47:20.0 e Sn Z
GRA1 23:48:05.4 e Sg Z
GRA1 23:49:37.9 e L Z T13.7 A21739 MS5.2
